



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Update: Solid State Lighting Technology Demonstrations

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Voices for SSL Efficiency
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Purpose of Market-Readiness Demonstrations

To place newly commercial, state of the art LED products for general illumination in a variety of real world applications that clearly demonstrate their high performance and cost effectiveness.

Goal: to facilitate the rapid market penetration of state of the art solid state lighting products.

- large scale purchases or promotions of *successful* products will follow the demonstrations



Approach

Teaming agreements for each demonstration are formed among:

- **Manufacturers-** donate products to be tested and participate in design activities as desired.
- **Host site organizations-** provide site for demonstration and willingness to participate in demonstration-related activities.
- **Utilities/energy efficiency organizations-** provide contacts with and assurances to host site organizations as necessary. Also, participate in post-demonstration promotion of successfully demonstrated products.
- **PNNL-** identify products suitable for demonstration, assist in identifying and evaluating suitable host sites, provide organization of the overall activity, evaluate the results (both quantitative and qualitative), conduct product performance and life testing, and support subsequent project information dissemination.



The Teams

- Proceeding with multiple products from three manufacturers. Applications include:
 - Display case lighting;
 - Under cabinet lighting;
 - Outdoor walkway and street lighting;
 - Security lighting.
- Two utility / regional efficiency organizations involved to date: PG&E and NEEA



Host Sites

- Demonstrations proceeding at four Federal sites, one CA municipality, and two PNW residential builders; several others in queue or under examination
- Federal sites include:
 - Smithsonian Museum of Natural History, Washington, D.C.
 - Port Huaneme Naval Air Station, CA
 - U.S. Postal Service Facility, Washington, D.C.
 - Federal Aviation Administration Test Center, Atlantic City, NJ



Timeline

- Due Date for Responding to Solicitation: April 2007
- Initial Selection of Products: May 2007
- Initial Product Samples Due to PNNL: June 2007
- Product Short Term Testing Completed: July 2007
- Installations Initiated: August 2007
- First Demonstration Completed: February 2008



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